

thinking out loud

Last year we announced the combination of our investor and issuer services capabilities under the name JPMorgan Worldwide Securities Services. This integrated franchise brings together a powerful model with product depth, feature functionality and global distribution to provide clients with custody, fund administration, investment operations outsourcing and securities lending to leading trust, collateral management and securities clearance. We feel that this array of products and services will be the winning hand going forward.

As we see shifts in the market and in our clients' investment styles and strategies, we continue to align our business to anticipate meeting those evolving needs through the servicing of a wide range of investment products on a global basis. Specifically, we are seeing the increasing use of alternative investments by our clients globally, and this space includes derivatives, hedge funds, private equity and leveraged loans.

It is through the ability to provide excellent service in the securities market as well as creating that same standard in the rapidly growing alternative investment space that we, as a top service provider, can deliver a strong and integrated offering to our clients. To that end, we have launched JPMorgan's Alternative Investment Services business unit, a suite of products that includes:

- Global Derivatives Services, providing valuation and processing of OTC derivatives, headed by Brenda Boultwood in New York.
- Hedge Fund Services, including the daily back and middle office operational capability recently acquired from Paloma and JPMorgan's highly-rated hedge fund administration unit, JPMorgan Tranaut. Hedge Fund Services is headed by Bhagesh Malde in London.
- Financial Computer Software (FCS), the Dallas-based global business unit that provides electronic data management for the leveraged loan market, headed by Mark Murray.
- Private Equity Fund Services, providing a full set of quality outsourced fund administration services to private equity firms and institutional limited partners, headed by Bob Caporale in New York.

Liz Nolan, business executive for WSS' international regions, is the global head of JPMorgan Alternative Investment Services. Her goal is to align the depth, service capabilities and innovation of the WSS alternative investment product set, and to leverage the firmwide resources, to build out the most complete industry model. We believe this model is the future to meeting clients' diverse and complex needs.

This issue of *Thought* looks at the role of these businesses as part of the alternative investment landscape. The content also illustrates the critical alignment between the capabilities within our Alternative Investment Services unit and our other product offerings, including Securities, Securities Lending, Trust and Clearance. Many of the products are integrally linked, and that gives us a way to fulfill our commitment to you, our clients, to deliver the full scope of leadership and innovation to further your business objectives.

Your questions and comments are always welcome and can be sent to thought.magazine@jpmorgan.com





Mike Clark, Worldwide Securities Services Global Business Executive

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Alternative investments have been a highly desirable option for many investors over recent years. The relatively strong performance of many of the private equity, hedge fund, leveraged loan, derivative and structured credit markets has worked as a useful counterweight against the lackluster returns and losses experienced in the equity markets.

Of course, not all returns have been constantly positive in these areas, nor have all traditional equity markets proved as disappointing to investors as some headlines suggest.

The 2000–2001 collapse in equity market values highlighted the fundamental problem with a conventional approach to equity portfolio construction: though this approach provided diversification across industries or geographies, it produced portfolios that remained hostage to one primary risk — namely, equity risk. One can increase an equity portfolio's diversification marginally by using different investment styles and/or by entering the small company or emerging market sectors; but even those diversification benefits can be limited, especially given the rise in correlation across global markets in times of periodic crises.

Alternative investments offer no guarantee of returns, but they are typically subject to different risks than equities and are less correlated than stock values — and this diversification of risks is the key. Moreover, the value of investing in these asset classes to counterbalance more traditional investment instruments is now well proven. And the precipitous rise in new money that is being injected into these alternative asset classes means they can no longer be ignored.

Alternative Asset Markets

The global over-the-counter (OTC) derivatives market has increased threefold since mid-2001, with the value of notional outstandings reaching some \$270 trillion at the end of June 2005. According to the Bank for International Settlements, the exchange-traded derivatives segment is booming as well. Exchange-traded financial derivatives rose to a record \$372 trillion by the end of June 2005 — a 22% aggregate nominal rise in the value of contracts traded in just a six-month period.¹

The other alternative markets are booming, too. The hedge fund industry has been expanding at an average rate of around 20% since 2000. Today there are over 8,000 hedge funds, managing aggregate assets of approximately \$1 trillion.

In private equity there are in excess of \$1 trillion fund assets under management globally — Europe alone has nearly \$360 billion in private equity fund assets. And last but not least, the very voguish leveraged loan market is now fast approaching the \$1 trillion level in assets.

 $1\quad Source: Bank\ of\ International\ Settlements;\ bis.org/statistics/derstats.htm$

Brenda Boultwood,

Global Derivatives Services



Double-digit growth continues in the global OTC derivatives market, where the value of notional outstandings was at some \$270 trillion as of June 2005.¹ Many of JPMorgan Worldwide Security Services (WSS) clients have begun to trade OTCs but are challenged by their operations and lack of independent pricing sources for the asset class. For a client trying to do it all in-house, experienced operations staff can be expensive and hard to find. Back and middle office processing is complicated and manual; and building a scalable technology infrastructure is cost-prohibitive for most.

To help clients navigate this alternative, JPMorgan created the Global Derivatives Services group to act as a center of excellence for OTC and exchange-traded derivatives pricing and processing. As one of the four pillars of our Alternative Investment Services division, Global Derivatives Services is fully integrated with our fund accounting, custody and collateral management services and supports a wide breadth of instrument types on an industry-standard technology platform. The group's operating model is designed to be highly scalable and easy to control.

"Global Derivatives Services supports a wide range of OTC instruments, and we are continually extending this range to meet client needs for instrument coverage," says Brenda Boultwood, head of Global Derivatives Services. "From simple interest rate swaps to more exotic structures, our Valuation Control Group is continually analyzing models and market data to provide independent valuations. Our in-house team of quantitative experts is available to consult with clients about derivative valuation issues."

On a daily basis, the Valuation Control Group calculates mark-to-market values using mid-market pricing. Market data is taken at exchange closing times, regardless of location, to provide the most accurate price available. Alternative price points can be captured according to client requirements. For exchange-traded instruments, industry-standard pricing sources are used to obtain market close prices.

JPMorgan's derivatives client base is broad, but it primarily includes asset managers beginning to employ a variety of trading strategies, including liability-driven investment, absolute return and high alpha strategies to maximize returns and remain competitive. The Global Derivatives Services Operations group and Valuation Control Group are based in the United Kingdom and support clients in Europe and the United States.

Global Derivatives Services has developed a direct interface between the OTC derivative system and the JPMorgan CommandDSM derivative collateral management system. Clients can use this service to provide OTC derivative valuations downstream for derivatives collateral management purposes.

Whether clients need a solution for full outsourcing or to solve a specific OTC problem, JPMorgan can offer a package of services or a menu of options to choose from.

1 Source: bis.org/publ/otc_hy0511.pdf

The Shift to Alternatives

The very size of these markets can be off-putting to some. A lack of familiarity with the products, the investment criteria employed by private equity hedge funds or the tradability and transparency of the leveraged loan markets may discourage others from venturing into the alternative asset classes. But more and more funds are poured into these types of investments as investors seek to overcome knowledge gaps with careful examination and targeted staff hiring programs.

In a 2004 JPMorgan Asset Management survey of European (ex-U.K.) institutional investors, 65% of responding institutions said they were interested in using hedge funds to help deliver higher returns; 57% said they were looking to private equity, 52% to currency strategies, and 6% to other assets such as structured credit. The findings suggested that European institutional investors are highly amenable to exploring nontraditional asset classes and strategies to achieve higher returns from their investment portfolios, although exposure to these alternative investments is still extremely low. The exposure from investors in Europe showed just 1.10% were invested in private equity, 1.62% in hedge funds and just 0.3% in commodities.²

An overriding theme that emerged from the JPMorgan Asset Management survey was that pension schemes that currently allocate assets to alternative investments are highly satisfied with investment performance. The majority of respondents stated that returns had either met or exceeded expectations for all assets classes, which is a strong endorsement of nontraditional assets, especially during a difficult time for stock markets. This strong performance, combined with the diversification benefits of including alternative investments in a portfolio, is expected to lead to further inflows into these asset classes in the future.

The JPMorgan Asset Management survey did not detail funds intentions *vis-à-vis* derivatives usage, but investors' use of the instruments is still expected to grow strongly. In North America, for instance, a 2005 Greenwich Associates study showed that a growing portion of institutional investors is already using listed equity derivatives not only for hedging and investing purposes, but also as alternatives to "cash" equities. They do so to gain exposure or take new positions, and as a means of minimizing equity trading costs, according to the same study.³

"The rising employment of equity derivatives in such strategies as actively managed long-only equity, passive equity index and simple price speculation suggests that a rising number of institutions are using equity derivative

- 2 Source: Institutional Insight 2004. "New Sources of Return: A report into the search for higher performance among Europe's institutional investors" JPMorgan Asset Management
- 3 Source: Greenwich Associates 2005 Equity Derivatives study

instruments as substitutes for 'cash' equity trading," said Greenwich Associates consultant John Colon.

Added Greenwich Associates consultant John Feng, "From the standpoint of these equity professionals, equity derivatives offer two other benefits: anonymity and leverage — although the amount of the latter obviously varies from institution to institution and from broker to broker."

Alternative Obstacles

Of course, OTC derivatives markets can be particularly daunting. The contracts can be traded in a variety of forms and reference assets ranging from credit facilities to real estate, interest rates to single stocks, foreign exchange, commodities, and from a range of indices to baskets of assets. The agreements are technical, and a fairly high level of legal expertise is required to understand the various obligations and rights of the parties. The breadth of the OTC derivatives market is still emerging, and at the same time undergoing considerable change — just keeping up with the ever-expanding range of products and their growing diversity is challenging.

If simply keeping up with market developments puts a strain on scant resources, the increasing diversity of the instruments and structures underlying this expansion is enabling investors to tailor returns and manage liabilities in a more exact manner than ever before. Investors can use the rapidly expanding credit derivatives markets to venture into the relatively illiquid corporate credit markets, to hedge corporate credit risks or to take on broad market exposures. Commodity derivatives can be used to access the otherwise cumbersome physical commodity markets and exploit their recent above-average increases in returns. Equity derivatives can be deployed to replicate equity exposures at a relatively low cost. Interest rate and inflation derivatives can help hedge future liabilities, and foreign exchange instruments can be used either as overlays or as outright hedges.

The Operational Challenges

For new market entrants, the learning curve is not limited to understanding the structure of the transactions or investments themselves. Before investing in these new

65% of responding institutions said they were interested in using hedge funds to help deliver **higher returns.**

instruments, investors have to also consider all the associated operational issues that relate to engaging in these transactions or investing in alternative investments. Careful and considered due diligence examinations have to be performed, credit and market risk parameters need to be examined and potential trading counterparts compared. In addition, just accessing some of these markets will often demand a full review of normal investment processes — if not a complete trading systems overhaul.

But it is in the post-trade world where alternative assets can often be most cumbersome. Here users have to face an array of operational issues that, combined with the new accounting and regulatory requirements, are burdensome in the extreme. Corporate pension funds considering investing in structured OTC derivatives, for instance, need to value their positions and net exposure with respect to each type of transaction engaged in with a particular counterparty on a daily basis. They would need to have the ability to make margin adjustments following moves in valuation, either posting additional collateral or taking collateral to mitigate their credit exposure to the trading counterparty. Doing this on a daily or weekly basis is cumbersome enough; but in times of severe market movements the processes can become allconsuming, leaving investors little time to continue with their core expertise, investing.

An October 2005 report by analysts from Celent^a highlighted just how large this operational issue is. After a thorough evaluation of more than 12 solutions in the European asset management space, just six of them met the criterion of providing front to back office support, according to Isabella Fonseca, Celent analyst and coauthor of the report. "There is no clear leader for all categories considered given the distinctions between the various types of solutions analyzed," she said.

JPMorgan Addresses Alternatives

JPMorgan, which itself is one of the largest alternative asset market participants globally, has extensive experience with these issues. As one of the pivotal players in these markets, the bank dedicates vast sums each year to ensure its own systems and processes can rigorously deal with the risk and operational processes required to successfully manage these rapidly growing asset classes. Drawing on this internal expertise, the bank's traditional strength in risk management and anticipating rampant growth in alternative asset classes, JPMorgan Worldwide Securities Services has been building out a range of similar services to support clients' activity in the alternative markets. These modular services include our Global Derivative Services business, a transaction maintenance and daily valuation service for a wide and growing range of OTC instruments. Valuations are based on industrystandard models with inputs from a wide range of independently sourced market data that is rigorously scrutinized and scrubbed to ensure all possible discrepancies are eliminated. Also included in our modular

4 Source: Celent, Comparing European Asset Management Systems

Alternative Investment Market:

A snapshot of opportunity

For JPMorgan Worldwide Securities Services, the formation of Alternative Investment Services is an example of the ongoing effort to ensure our products and services meet the changing needs of our clients. Liz Nolan, head of Alternative Investment Services, commented, "Putting these businesses under one roof allows us to better capture the value of effectively serving our clients, who are investing in these vehicles." Here's a snapshot of the opportunity across these asset classes:

Hedge Funds⁵:

- ► The hedge fund market currently includes more than 8,000 funds globally with \$1 trillion in assets under management. The market is expected to exceed \$2 trillion by 2008–2009.
- ► Nearly 90% of European hedge funds outsource, compared to 50% in the United States.
- ► Rate of outsourcing is likely to increase with regulatory pressure.

Private Equity Funds⁶:

- An estimated 1,500 private equity firms have invested approximately \$1.3 trillion.
- Private equity firms were expected to have raised \$200 billion by the end of 2005, with 63% coming from North America, 29% from Europe and 8% from the rest of the world.
- ► By 2010, Europe is expected to raise 40% of new financing, with 52% from North America and 8% coming from the rest of the world.
- 5 Source: "Hedge Fund Services Heat Up", Wall Street Technology; fundstreet.org/research
- 6 Source: International Financial Services; Galante PE Directory; LP market data, Thomson; Private Equity Spotlight, preqin.com
- 7 Source: Bank of International Settlements, semiannual statistics on positions in the global OTC derivatives market for the end of June 2005
- 8 Source: S&P

Derivatives⁷:

- ► The derivatives market has two segments: over-the-counter (OTC) and exchange-traded derivatives.
- ► OTC derivatives account for 84% of the market, with outstandings currently estimated at \$248 trillion. This market grew 32% from 2003 to 2004.
- ► Exchange-traded derivatives are attractive to asset managers who like the standardized nature of the investment.

 This market grew 20% from 2003 to 2004.

Leveraged Loans⁸:

- ➤ Volume of leveraged loans growing: global volume totaled \$815 billion in 2005 from 2,112 deals, compared to \$516 billion from 1,705 deals in 2004.
- ► M&A a driver: a main driver in leveraged loans in 2006 is expected to be increased M&A activity. Hedge funds now make up 9% of the leveraged loans market.
- FCS specializes in developing software (Wall Street Office), outsourcing solutions (Loan Admin Outsourcing) used to administer and analyze syndicated bank loans and Collateralized Debt Obligations (CDOs), and loan data management.

Private Equity Fund Services:

Fund Administration Services:

Client On-Boarding Service Fund and Partnership

Capital Calls and Distribution

Treasury Services

āx Support Services Vaterfall/Carry Administrati

Management Company Administration

Management and Financial Reporting

Portfolio Administration Services:

Partnership Investment

Cash Flow Tracking and Forecasting

Performance Measurement Pricing and Valuation Support

Statement Reconciliation

Related Banking Products:

ustody Jerivatives

Foreign Exchange

Hedge Fund Services:

Assistance with Fund
Establishment and Setup

Daily Pricing of Portfolio, Including OTC Derivatives Movement of Cash and

Processing of Corporate

Daily NAV and Profit/Loss

Shareholder Interactior

Maintenance of Financia

Corporate Secretaria

Custody for Fund o

Global Derivatives Services

Term Sheet and Conf

Instrument and Counterparty Static Data Set Up Daily Pricing and Chang Explanations

Model Validation and New Instrument Support Daily Reconciliation of Pricing. Management
Positions, Pricing and
Cashflows fed to WSS' Fund
Accounting Platform

Pre-settlement Payment Validation with Counterparty, including Cashflow Break

Settlement Information

Reporting of Trade Details, Event Diaries and Cashflows through Views, JPMorgan's Integrated Reporting Tool

FCS.

Business Consulting:

Portfolio Management, Administration, Reporting and Analysis Cash Reconciliation

Daily Activity Processing

Data Cleanup
Process Reengineering

Technical Consulting:

Server Creation Environment Setup Network Configuratio

Training:

Basic and Advanced Training on Wall Street Office and/or Industry Concepts



services are: JPMorgan CommanDSM, an advanced collateral management service; JPMorgan Hedge Fund Services, a hedge fund administration business incorporating JPMorgan's acquisitions of Tranaut and Paloma's middle and back office operational capacity; Private Equity Fund Services business; and Financial Computer Software (FCS), also known as Leveraged Loans Services.

The JPMorgan CommanD offering includes dedicated services that help clients meet the margining requirements under their International Swaps and Derivatives Association Credit Support Annex (CSA) agreements with counterparties. JPMorgan CommanD provides an end-to-end collateral management service incorporating valuations, CSA management, settlement and custody. In addition, it can track rehypothecation movements and service rehypothecated assets and can help clients structure cash reinvestment solutions to optimize the returns on cash collateral, working closely in line with the terms of their CSAs.

The instruments covered by Global Derivatives Services already include interest rate and currency swaps, FRAs, interest rate and currency options and swaptions, bond options, and single-name and index-based derivative transactions. In the works are services to support basket-type trades, equity swaps, inflation and commodities trading.

"The benefits of derivative services are easy to understand," says Brenda Boultwood, global business executive for JPMorgan's derivatives business. "Clients can pick and choose from a wide menu of support services, depending on the types of transactions and where their own internal systems may be lacking. They can effectively outsource these transaction maintenance and valuation processes to a reputable and dependable provider, JPMorgan, eliminating the need to make a substantial investment in all the systems and pricing services to which they would otherwise need to subscribe."

It is often at this stage in the yearly investment cycle that managers seek to re-examine their portfolio allocations, and consider venturing into new markets and how they will apportion their available investment capital. The alternative markets will — if all the surveys are correct — see a massive influx of investment over the coming months, which should do much to reduce current concentrations in traditional asset classes. But these new markets are testing fund managers. There is no easy way to gain a grip on the products and acquire solid market knowledge, nor any quick fix that will ensure that all the investments will deliver. But by working with JPMorgan Worldwide Securities Services, clients can at least hope to reduce some of the economic outlay necessary for their first investments and mitigate some of the operational risks.

JPMorgan's capabilities in these areas are a natural extension of the existing Worldwide Securities Services' longer-standing activities. For instance, just as valuations are hard to come by in the OTC derivatives market, they are similarly in short supply in the asset-backed securities (ABS) market. JPMorgan can provide all the necessary support for those investing in this market — from ABS lending services to valuations and custody services through Leveraged Loan Services. Additionally, the bank's collateral management service assists clients to fund assets in the most efficient, appropriate and economic manner possible.

Clients of JPMorgan's Alternative Investment Services also have the opportunity to access JPMorgan's cash management, custody, escrow, foreign exchange, transaction advisory and other functions. All the different services are housed within the integrated JPMorgan Worldwide Securities Services franchise, which provides everything from custody to fund accounting, securities clearance and trust services. Clients investing in alternative asset classes can focus on their core competencies while JPMorgan meets their administrative requirements.

According to Liz Nolan, global head of JPMorgan Alternative Investment Services and business executive for JPMorgan Worldwide Securities Services in Europe, the Middle East and Africa, "By integrating all of these services within a single division, JPMorgan has really created a unique offering. We are continually adding to those we offer and are working constantly to ensure that the services we have already meet all possible client needs and remain in step with regulatory, reporting and accounting requirements."

JPMorgan Worldwide Securities Services works continuously to ensure that its capabilities provide a properly meaningful service to its clients. The business of investing is complicated enough, without investors needing to turn to multiple providers.

If you have interest in speaking to us further about these capabilities, please contact your representative or visit us at jpmorgan.com/wss



Interview with Liz Nolan

Liz Nolan, business executive for Worldwide Securities Services' interational regions and global head of JPMorgan Alternative Investment Services



Thought: How do you define the alternative investments space?

Nolan: Different asset classes continue to emerge, but we are currently most focused on the alternative investment products and strategies in which we are seeing most interest from our clients: derivatives, hedge funds, private equity and leveraged loans. It is for these areas that we are providing servicing solutions that allow our clients to increase efficiency and enhance their performance.

What trends do you think are driving the growth in this space?

Investors are increasingly looking for alpha, and the risk/return reward of the alternative asset markets relative to equity markets in recent years has been attractive to a growing number of investors. At the same time, improved information on previously unfamiliar instruments has allowed many investors to enter these markets for the first time.

The operational issues and the accounting and regulatory requirements that are associated with these assets can be cumbersome and costly. This is leading to another trend — that of seeking post-trade support from specialist providers, such as JPMorgan.

Why has JPMorgan created a dedicated Alternative Investment Sources business unit?

The alternative investment space has grown rapidly and nowhere has this been more evident than in our clients' needs and expectations. JPMorgan created the Alternative Investment Services unit in order to keep pace with our clients' requirements for services across a range of asset classes that require specific skills and technology.

The group is directed to delivering what are sometimes complex solutions, at the same level of excellent service that we offer in the established securities market.

It brings together already successful businesses, such as our Financial Computer Software (FCS) group which has been providing electronic data management for the leveraged loan market for years, and makes their services more easily accessible to clients alongside other related — and sometimes newer — solutions. The other products included in the unit are Private Equity Fund Services, Hedge Fund Services and Global Derivatives Services.

How does JPMorgan Alternative Investment Services differ from wha other providers are offering?

JPMorgan has a long and successful track record in delivering a comprehensive suite of securities services, and Alternative Investment Services is a logical extension of our capabilities. We can draw on the depth and breadth of the whole firm to offer sophisticated solutions tailored to our clients' needs. We can also offer clients a one-stop shop that they will not find with other providers.

To which types of clients can you provide services?

We can offer services to our institutional investor, pension fund, private equity firm, hedge fund, fund of fund, corporate, financial institution and other clients. JPMorgan's global footprint is expansive and our alternative investment services are available in a range of locations.

JPMorgan recently announced the expansion of its Hedge Fund Services business — what changes can we expect to see?

The acquisition of Paloma complements the hedge fund administration services offered through JPMorgan Tranaut with a distinctive middle and back office outsourcing solution. The middle office function of producing the manager's daily profit and loss account and calculation of performance fees offers independent credibility to institutional hedge fund investors and frees more resources for the manager to allocate to the core business of trading and investment management.

Why has JPMorgan chosen to make acquisitions in this space rather than grow organically?

JPMorgan has grown both organically and by acquisition in the alternative investments arena.

Our Private Equity Fund Services unit, which offers a full suite of high-quality outsourced fund administration services to private equity firms and institutional limited partners, grew from within the JPMorgan business.

However, where we have identified companies as best-in-class in their industry, it has sometimes made sense to bring them into the JPMorgan franchise. These specialist providers have generally had in common their strong technology and systems, considerable staff expertise and a good cultural fit with JPMorgan. A good example is JPMorgan Tranaut, with its infrastructure developed specifically for the hedge fund industry, its experienced personnel and its culture of appreciating the value of service.

JPMorgan will always consider the best arrangement for its clients when developing a service offering.

Meeting the Challenge of a Dynamic Market:

Hedge Fund Services

Services

Services

As the hedge fund market continues its upward climb, many have raised questions about how to best support this asset class in the future. With increasing regulatory scrutiny, coupled with increasingly risk-laden investment strategies, the quality of service of third-party providers takes on new significance and greater importance. Here's why...

The hedge fund market continues to grow, forming more distinct segments as it matures and responds to the entry of institutional investors. Furthermore, the original model of bold startups launched by one or two savvy traders pursuing a creative investment strategy has given way to the entrance of many large global asset managers who are entering the space in an effort to grow and diversify their businesses. The "fund of hedge funds" model that offers investors the opportunity to invest in several hedge fund strategies at once has become increasingly popular. These funds of funds offer the potential for absolute returns with the additional benefits of diversification, professional screening and oversight.

When it comes to service, each segment has distinct demands. Smaller single-strategy funds expect a high-touch, one-to-one approach, while larger players look for more industrial strength. Funds of funds have a completely separate set of needs. "Larger hedge fund complexes may come

to dominate," says Bhagesh Malde, global business head for Hedge Fund Services at JPMorgan, "but the smaller players will always be important as the



Bhagesh Malde

industry's essential source of creativity and innovation. Our goal is to serve all segments well."

In response to this dynamic market, global banks seeking to scale operations and set new standards for value-added services have acquired many of the boutique hedge fund administrators once common in the field. At the same time, the relationship between a hedge fund and its administrator has become increasingly important as institutional investors enter the market and as declining returns compel managers to find cost-effective solutions. Occasional scandals have also highlighted the risk of loose controls, causing legislators and

regulators to frequently debate the need for more stringent hedge fund oversight. The Securities and Exchange Commission (SEC) rule requiring hedge fund managers with 15 or more U.S. clients and more than \$25 million in assets to register and comply with reporting requirements and periodic audits took effect in February 2006 for U.S. managers who have customer lock-ups of less than two years. Similarly, pressure for increased regulation began mounting last year in the United Kingdom when the Financial Services Authority (FSA) published two discussion papers about the risks for institutional and retail consumers in the hedge fund industry.

Growth Outlook Remains Strong

Hedge fund net inflows dipped in 2005 as returns for the most part declined, but few observers expect hedge fund growth to slow any time soon. Annual growth forecasts range from 15–20% for the next three to five years, with hedge fund assets projected to double from \$1 trillion currently to \$2 trillion by 2008 or 2009. At that point, according to a report from TowerGroup, hedge fund services will be a \$2.5 trillion industry.

Hedge funds continue to attract assets from their original base of high-net-worth individuals, but much of their incremental growth is expected to come from institutional investors shifting allocations from other asset classes into hedge funds and alternative investments with the goal of improving returns and diversifying risk. "Hedge funds are capturing a bigger share of global investable capital," says Stephen Castree, head of strategy and product development for JPMorgan Hedge Fund Services, "but in percentage terms they are still a small fraction of the whole, relative to traditional equity and fixed income asset classes." In short, hedge funds have plenty of room to grow.

A global perspective points to some key differences in regional hedge fund growth patterns. In the United States, where hedge funds have long been popular, growth is slowing, although new players and strategies continue to emerge. The pace of growth is currently faster in Europe, where the business is roughly 10 years younger than it is in the United States. The next big growth market could be Asia, where hedge funds are just starting to become popular.

New Challenges for Managers...

Declining hedge fund returns — whether cyclical or by sector — combined with new demands from institutional investors, are compelling managers to re-evaluate investment and operational strategies. In the process, they are creating new opportunities and challenges for their service providers.

By nature, hedge funds profit by identifying and exploiting market inefficiencies; but as the number of managers pursuing a given strategy increases, the inefficiencies become scarcer and the manager has to move away from the pack to deliver the alpha. As a result, hedge fund portfolios comprise ever more complex investments as strategies become more diverse and specialized.

According to a 2003 study by Capco, operational issues account for more than 50% of hedge fund failures.¹ With returns hard to find, hedge fund managers are facing a trade-off between the need to stay focused on their core competencies and the need to invest in the physical and human capital required to maintain appropriate controls, pointing to a growing market for high-quality third-party administration services. The quality of hedge fund administration is also critically important to institutional investors

1 Source: "Understanding and Mitigating Operational Risk in Hedge Fund Investments: A Capco White Paper," March 2003

The use of a qualified and reputable hedge fund administrator is a marketing tool as well as a **practical necessity** for most hedge fund managers.

whose fiduciary obligations require them to perform more stringent due diligence than a high-net-worth individual investor might require of a hedge fund. In this sense, the use of a qualified and reputable hedge fund administrator is a marketing tool as well as a practical necessity for most hedge fund managers.

"Most European hedge funds were formed after well-publicized losses in a few large U.S. funds," Castree notes. "They have 'grown up' using third-party administrators; so, in many respects, the hedge fund administration business is more established in Europe. In the United States, many funds continued to do their own administration until recently; but the cost and the risk of the in-house function are now making third-party administration a more efficient and effective alternative."

The possibility that new regulation will create new compliance needs also enhances the value a third-party administrator brings to a hedge fund manager. "An independent administrator cannot substitute for a hedge fund manager's in-house compliance officer, but it can help a hedge fund understand and respond properly to any regulatory demands that emerge," Castree says.

...And Their Administrators

As new strategies and trading ideas emerge, hedge fund administrators are continuously pressed to independently value more complex investments in the portfolios. "Credit default swaps were exotic just a few years ago. Now they've become commonplace, and we have funds investing in weather derivatives," says Stuart Drake, senior client executive for Hedge Fund Services. In some cases the distinction between private equity funds and hedge funds is blurred, as hedge funds begin to take stakes in emerging companies. "The hedge fund administrator has to maintain the expertise to assign independent and accurate values to an ever-widening range of innovative investment vehicles," Drake notes. "Because the hedge fund administration business is still maturing few people have the right combination of experience and service attitude, and they do not come cheaply. This service is not likely to become commoditized anytime soon."

Institutional fund managers and institutional investors have also increased

Daily Operational Outsourcing

In February, JPMorgan Worldwide Securities Services (WSS) announced that it agreed to acquire the middle and back office operations of Paloma Partners Management Company (Paloma). Paloma is part of a privately-owned investment fund management group, based in Greenwich, Connecticut.

"Paloma's experienced personnel and innovative technical platform are very attractive to JPMorgan. This acquisition allows us to immediately offer our hedge fund clients a high quality option — built on top of a hedge fund-specific platform — for outsourcing their daily operations," said Liz Nolan, global head of Alternative Investment Services for JPMorgan WSS. "We aim to lead the industry in servicing clients with complex alternative investment strategies, and the next step in the growth of our integrated Alternative Investment Services unit is the acquisition of Paloma's middle and back office operations."

The parties have also agreed to enter into a multi-year contract for JPMorgan to provide daily operational services to Paloma. "JPMorgan's experience in supporting the hedge fund segment and quality approach to service ensure that Paloma will have the best-in-class operations and infrastructure to support our investment portfolio," said S. Donald Sussman, founder of Paloma and owner of the company that manages the Paloma funds. "Outsourcing these functions to JPMorgan at this time allows us to bring even greater focus to the investment side of our business."

demands on hedge fund administrators for more frequent net asset value (NAV) calculations, timelier reporting, a greater variety of risk metrics and more bespoke reports. Hedge fund managers are also now more often requesting service level agreements that resemble what is seen in the traditional mutual fund world, to establish accountability for delays and errors. On the whole, these trends are positive for investors, but they have impelled big shifts in the world of hedge fund services.

A Changing Playing Field

Boutique firms with custom-built systems, smart and experienced people and a hightouch service approach earned early success in hedge fund administration. As banks and larger asset servicers enter the field, they have found a buy-and-grow strategy more practical than building a business from the ground up or retooling mutual fund administration systems to meet very different hedge fund needs. HSBC bought Bank of Bermuda, BISYS acquired Hemisphere, Bank of New York bought IFA, State Street Bank bought IFS, Citigroup acquired Forum and Mellon bought DPM. JPMorgan's acquisition of Tranaut Fund Administration in 2004 offers another example of this trend.

Founded in Dublin in 1999, Tranaut was established to set higher service standards for single-strategy hedge fund managers with big ideas but small operations and staff. Stuart Drake and his team built a customized system for hedge fund share registry and transfer agency, staffed their team with accountants who all had deep hedge fund specific experience and a customer service focus.

"As we saw hedge funds becoming more institutionalized, we recognized the need to align ourselves with a bigger partner and a bigger balance sheet if we wanted to grow market share," says Drake. "As part of JPMorgan, we can take advantage of opportunities to serve larger funds and add capabilities to our offerings."

Clients are the beneficiaries of these combined capabilities. As evidence, Drake describes a client with a portfolio of collateralized debt obligations (CDOs) and bank debt wrapped into a hedge fund and valued at \$1 billion. Between JPMorgan Tranaut and FCS, a service provider for leveraged loan investors, JPMorgan can provide this fund manager with expert service on several highly specialized fronts, all from under one roof.

A big attraction for JPMorgan was Tranaut's emphasis on quality. "In a world where much of the service delivery was mediocre, Tranaut had built a sterling reputation for low staff turnover, zerotolerance for NAV errors and never losing a client," says Malde. "Together we are looking at ways to use JPMorgan's technology and systems to scale the operation and increase its efficiency without compromising that quality."

Moving to Daily Operational Outsourcing

JPMorgan's recent acquisition of middle and back office operational capability of Paloma Partners Management Company complements the existing hedge fund administration services with an ability to provide daily operational services to multi-strategy hedge funds. "The work of managing the day-to-day middle and back office operations for a fund is another area where a third-party provider can bring the independence and credibility that institutional hedge fund investors appreciate," says Malde. "From the manager's perspective, outsourcing can turn a high fixed overhead cost into a more manageable variable cost that moves with asset levels. It also frees more resources to allocate to the core business of trading."

JPMorgan evaluated several options for building its middle and back office outsourcing capability and settled on Paloma for several reasons.
First, the platform



Peter Salvage

was created for a large mutli-strategy hedge fund. "Our customers have different deadlines, different valuation needs and different trading relationships then traditional mutual fund managers. We needed a hedge fund specific platform to get the service right for our clients" said Peter Salvage, global product head for Hedge Fund Operations, the middle and back office outsourcing product. Another key in the decision was the breadth of capabilities in the Paloma operation. "We have customers using all major trading strategies and we're seeing more multi-strategy funds. Over the last 16 years the Paloma staff and systems have handled every major strategy from statistical arbitrage to relative value fixed income. The strength of their people and technology really stood out," Salvage said.

Due Diligence Checklist for Evaluating a Hedge Fund Administrator

The quality of a hedge fund's administrator is vitally important to the risk profile of hedge fund managers and investors. The following are key questions central to performing due diligence on any current or prospective hedge fund service provider:

- How is the administrator's operation staffed? Do they have experienced, well-trained professionals and a commitment to keeping them?
 How do they assure the ethical conduct and integrity of their personnel?
- Where is the administrator located?
 Are its locations compatible with the fund's jurisdictions?
- Is the administrator directly regulated?
- What is the administrator's service philosophy? Who is the primary point of contact? How many clients is each person expected to serve? How are investor inquiries handled?
- How does the administrator value complex investments? Does it have independent and reliable information sources for instruments such as OTC derivatives and structured products?
- What kind of controls are in place for managing operational risk? What is the ratio of automation to human judgment in the administrator's processes?
- What kind of technology does the administrator have in place? How is it used? Are the systems geared toward the investor and the balance sheet or toward the manager and the P&L? Does the technology focus on reducing errors and improving efficiency or is it intended as a substitute for personto-person contact?
- What are the administrator's disaster recovery and business continuity plans?
- What middle office or other ancillary value-added services can or does the administrator provide?
- What are its reporting capabilities? Are reports accessible when you need them? Can you customize reports and import data to internal systems?
- How does the cost of the service relate to its value? The fee for hedge fund administration ranges from five to 25 basis points, depending on the complexity of the portfolio and the level of service demanded.

demonstrate the need for different service bundles. They face some challenges common to single-strategy hedge fund managers, along with others that are

Similar to single-strategy hedge funds, funds of funds can also benefit from inde-

distinct to their structure.

pendent NAV verification as well as the accounting, investor communications, setup assistance, corporate secretarial services, Web reporting and other checks and balances that a third-party hedge fund administrator provides.

Other fund of funds needs require unique responses, however. For example, fund of funds managers have their own subscription and redemption time frames, but they also have to comply with the various subscription and redemption frameworks among the single-manager funds in their portfolios. Differences in timing here can create specific credit and liquidity needs for the fund of funds managers to meet their obligations to their investors. In addition they often need a custodian to hold the documents certifying their investments in the underlying funds. Where a single-strategy fund manager can turn to its prime broker for credit and custody, the fund of funds manager does not use a prime broker, and therefore, has to look elsewhere for these services.

At the end of 2005, JPMorgan introduced a Fund of Hedge Funds Solution that bundles administration, document custody and cash management services for a single asset-based fee. "Our fund of funds solution integrates the capabilities of JPMorgan Tranaut with those of JPMorgan's Treasury Services businesses to meet client needs," says Malde.

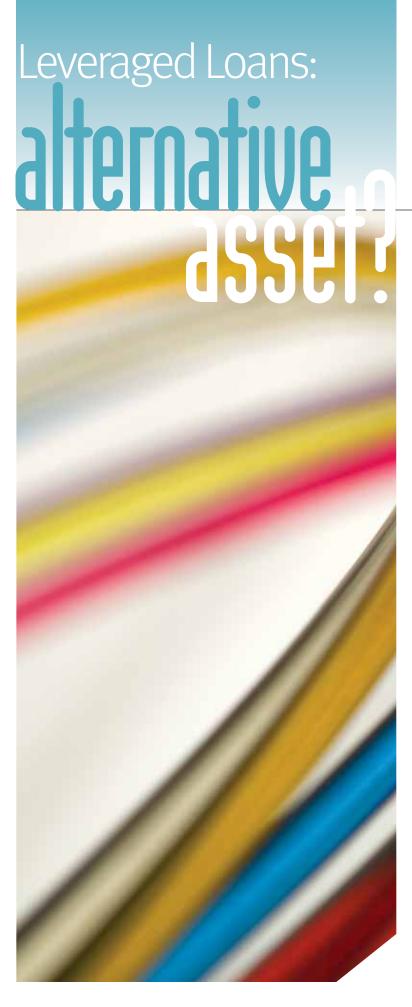
"The Fund of Hedge Funds Solution, along with others on the drawing board, epitomizes JPMorgan's response to the dynamic hedge fund market." As Malde sums up, "We are bringing together core JPMorgan strengths with newly acquired specialized skills and investing the resources necessary to distinguish our services and make JPMorgan the market's highest-quality provider."

With middle and back office outsourcing and third-party fund administration, JPMorgan can now offer hedge funds a variety of options for increasing efficiency and accuracy in its operations.

Distinctive Needs of Funds of Funds

Multi-manager funds of hedge funds

On the whole these trends are **positive for investors,** but they have impelled big shifts in the world of hedge fund services.



In recent years, institutional investors looking for greater yields have increasingly turned toward alternative investments. But what precisely is an alternative asset? Googling¹ the phrase will turn up: "a term referring to nontraditional assets with potential economic value." Examples cited include art and antiques, precious metals, fine wines, rare stamps and coins, and other collectibles such as sports cards.

But when we're talking about financial instruments, this definition needs refinement. Perhaps the most sweeping definition may be simply that alternative investments are structured differently from traditional securities. That definition would certainly encompass the leveraged loans (also referred to as bank loans or syndicated bank loans) that are packaged and sold on the secondary market. The way they are originated, structured and administered is nontraditional in that it is labor-intensive and distinctly low-tech. But the way they are priced, monitored and secured makes them profitable and comparatively safe for investors — hence their appeal for investors looking for a new slice of the capital pie.

A Very Brief History of Debt

Secured debt has been a fact of life since the first cashstrapped farmer guaranteed a loan with in-ground crops. The lender, no doubt, negotiated a good return as well as a rough loan-to-value estimate. We can imagine that when the loan was repaid to everyone's satisfaction, others followed suit.

Fast-forward a few centuries to a time when multinational companies and sovereign nations had borrowing requirements well beyond any one bank's lending limits. To efficiently meet their needs, banks banded together to form syndicates that collectively extended jumbo loans. Each member of the syndicate shared in fees, principal, interest payments and collateral prorated to its share of the loan. A rudimentary secondary market soon followed as

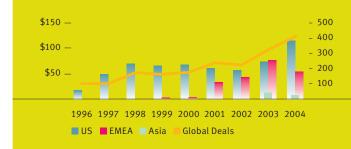
1 "Google" is a registered trademark of Google, Inc.

<u>Think of a CDO</u>

as a giant mutual fund for institutional investors.

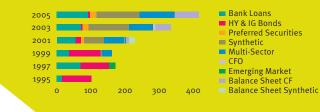
Historical CDO Market Growth

Issuance (\$billions) and number of global deals



CDO Global Structure Analysis

Number of global deals



banks sold pieces of their shares to other banks as a means of managing balance-sheet exposure to corporate names, industries and countries.

Although banks monopolized this market through the 1980s, other financial institutions began to look beyond traditional corporate securities to secured, floating-rate loans. While portfolio managers were able to quickly accept allocations of these assets, the middle and back offices that had to administer them were forced to develop new processes and adopt new platforms that could handle the leveraged loans' inefficiencies.

Adding Structure to the Secondary Loan Market

As leveraged loans began to populate institutional funds known as CDOs (collateralized debt obligations) and mutual funds referred to as Prime Rate Funds, other entities began to look more closely at them. Some could not be a part of the initial loan syndicate because of regulatory constraints. This problem was relieved once the major investment banks began to trade loans as securities, in a manner similar to equities and bonds.

These non-bank loan buyers had to come to grips with the complexity of the settlement process and the lack of market information, which provided less transparency and liquidity than they were used to. This has at last subsided as more market data has become available and as the buy side of the loan market has expanded.

Secondary loan trading volume and new issuance volume hit record highs in 2005. More than 75% of the leveraged loan market is now reported to be held by non-bank institutions. This growth has been fueled by hedge funds that have created unique structures that have produced betterthan-average returns to the overall hedge fund market.

Leveraged Loans and Structured Funds

Toward the end of the 1980s, a more structured secondary market emerged in the United States. Investment banks established special-purpose vehicles (SPVs) to hold pools of similar assets and issue securities backed by those pools of assets.² The CDO's assets initially included high-yield bonds, emerging market securities and syndicated loans, but later expanded to include

swaps, synthetics and asset-backed securities. This diversification was the beginning of the CDO market we know today.

CDOs are still the largest subset of the leveraged loan market, however, growth on a combined basis in other areas such as mutual funds, insurance companies, hedge funds and even private equity is strong. One of the first signs of this emerged in 2003, when the composition of the institutional investor leveraged-loan market showed a year-over-year decline in ownership by CDOs (67% to 62%), an increase for insurance companies (4% to 7%), a decline in the mutual fund sector (20% to 15%) and an increase in the hedge fund market from 1% to 10%.³

Anatomy of a CDO

A CDO's assets (including leveraged loans) are allocated to credit-based tranches, which may be rated from AAA (senior) to BBB (mezzanine) and non-investment grade for subordinated debt. The ratings and the rate of return are determined by the creditworthiness of the underlying assets, the depth of collateral coverage and the protec-

- 2 CDO Handbook, JPMorgan Securities, April 2, 2002
- 3 Source: CSFB



tion afforded by more junior tranches. Investors may also invest in equity, the riskiest — and potentially most lucrative — tranche.⁴

To simplify, CDOs are diversified corporate obligations secured by loans, bonds, other assets and derivatives, and sold to investors. Mark Murray, head of JPMorgan FCS, says, "Think of a CDO as a giant mutual fund for institutional investors."

The CDO product, once dominated by U.S. institutions, has spread throughout Europe and Asia, which today are major providers of the syndicated loans that institutional investors find so appealing.⁵

New Structures

The variety of CDOs has expanded as well, as investors and issuers look for diversification and return. Innovations include different structures and asset types that meet evolving global demand. Here, very briefly, are a few of them.

CDOs may be either cash-flow or market-value.

- Cash-flow CDOs are rated by how well the cash flow of the underlying assets can service principal and interest payments.
- Market-value CDOs are rated by the value of the underlying assets, which are marked-to-market periodically.

CDOs can also be managed or static.

- Managed CDOs are actively traded by collateral managers.
- Static CDOs are traded under limited conditions, the collateral remains with the CDO for its life.

Cash and synthetic CDOs make up a third set of distinctions.

- Cash CDOs are backed by assets and carry the associated default risks. The categories mentioned above are all cash CDOs.
- Synthetic CDOs offer exposure to an obligor through credit default swaps. Think of synthetic CDO as

insurance; the counterparty pays a premium to the CDO to guarantee a third-party credit in the event of default. These credit derivatives are attractive because they may require little or no cash outlay.

CDOs are categorized as *balance sheet* or *arbitrage* CDOs depending on the motivation of the seller.

- With balance sheet CDOs, sellers (usually banks) sell the assets to the CDO to manage exposure, shrink their balance sheets and reduce required capital.
- Arbitrage CDOs are inspired by equity tranche investors who hope to achieve a leveraged return between the after-default yield on assets and the financing costs due to debt tranches. This spread, or funding gap, is the arbitrage.

CDOs backed by real estate assets, diversified assetbacked securities (ABS), trust-preferred securities and highly rated asset-backed securities, rather than the more traditional bonds and syndicated loans, have gained recent popularity.

For Global Investors

Much of the growth in CDOs is coming from Europe and Asia, with local markets evolving to meet specific needs. The CDO market in Asia, for example, is highly fragmented. Almost half of the issuance volume is comprised of balance sheet transactions structured by Japanese banks seeking capital relief. Growth in the European market, on the other hand, has been fueled primarily by synthetic structures in France, Germany and the United Kingdom.⁷

The Future of CDOs⁸

While CDOs began in the United States, they have been enthusiastically adopted in Europe and Asia. JPMorgan's CDO professionals have studied the

- 4 Source: CDO Handbook
- 5 Source: "Universal Banking? Credit Markets Move (Patchily) Toward Convergence," by Meredith Coffey
- 6 Source: CDO Handbook
- 7 Source: JPMorgan CDO Current State
- 8 Source: ITS CDO Current State

Wall Street Office[™]

Portfolio Management System

Recognizing the intricacies of the alternative investment market and the difficulty of accurately managing the underlying assets in structured deals, FCS developed **Wall Street Office** (WSO)⁹, a portfolio management system that has become the CDO gold standard since its launch in the early 1990s. Today, WSO is used to manage more than \$200 billion in assets, providing immediate access to real-time data in more than 150 standard reports.

Wall Street Office makes the management of portfolios and structured deals a more efficient and effective process. Straight-through processing, from trading to tracking through reporting, provides one solution for all portfolio management needs. Functionality tailored to the asset types found in structured deals and compliance reporting specific to each structure allow clients to devote their time to maximizing the performance of their portfolios.

WSO Accounting is a customized interface that allows users to convert transactions performed in WSO Administrator into journal entries that can be imported into a general ledger package.

WSO Administrator is the core of the WSO portfolio management system. Users enter trades, process daily transactions, view position details and store records of referential data.

WSO Advanced Reporting provides the ability to publish and schedule reports and includes a wizardbased custom reporting tool. **WSO Agent** completes the front to back office solution by providing software for loan and participation administration.

WSO Compliance allows structured fund managers to monitor and manage their funds efficiently with respect to their indentures or unique reporting requirements. Its capabilities include performing pretrade hypothetical scenarios.

WSO Fax is a Web-based system used in conjunction with an FCS service that categorizes agent notices on syndicated loans. WSO Fax facilitates the efficient use and historical retrieval of information by portfolio managers and their agents, such as auditors.

WSO Performance allows managers to quickly analyze their portfolios and look at AIMR-compliant performance attribution.

WSO Reporting provides immediate access to more than 100 standard accounting and portfolio analysis reports.

WSO Security is an applicationbased security feature that gives users access to information that is directly related to their jobs and responsibilities.

WSO Web is the Web-based application used by clients who choose to outsource their back office operations to JPMorgan FCS Data Services.

9 Source: FCS marketing materials (print and online): fcsoft.com/n.x/Public/Home/Solutions/Wall%20Street%20Office



regional markets and anticipate the near future to unfold according to the unique demands of each. Globally, the future of the CDO market will see a host of structures of varying complexity and asset types, which will put pressure on service providers to deliver rapid, flexible and affordable solutions.

Asia: Regulatory changes have dramatically changed the landscape for structured credit products in Asia, as policymakers have lifted various restrictions for insurers and domestic banks to invest in CDOs for the first time. As these investors become more familiar with diversifying asset types and structures, they will issue more complex cross-border transactions. Growth will move away from Japan to Taiwan, South Korea and Singapore, and will increase as participants become more comfortable with complex structures.

Europe: Euro-denominated CDOs now account for 35% of total CDO volume. Collateral diversification will usher in more multicurrency transactions, while cross-border deals will result in fewer local transactions. As securitization laws shape the European markets, Germany, France and Ireland are expected to see higher levels of CDO issuance.

United States: Innovations in new structures and asset classes continue as collateral managers and investors seek new yield opportunities while minimizing risk. Standardized international reporting and regulations will require greater levels of disclosure and transparency of structured transactions such as CDOs. Liquidity will grow with wider investor participation (hedge funds, as discussed), and the availability of new products and maturing technology.

Hedge Funds Keep Pouring In

Hedge funds have now become the third-largest institutional investor in the leveraged loan market. The growth in the hedge fund business is spurred by decreasing returns to CDO equity investors and an overall appetite of alternative investors seeking greater than 15% returns. The leveraged loan market is unusual in that it trades on inside information, is not regulated by the SEC and is composed of many banks, structured vehicles

and mutual funds that have limited portfolio liquidity. Not surprisingly, then, a segment of experienced loan investors have migrated to hedge funds to try and gain an arbitrage advantage. An early belief that hedge funds were only interested in the distressed portion of the leveraged loan market does not appear to be accurate, as the distressed market (loans priced less than 90) decreased in 2003 from 34% to 8%.

A major sign of continued growth and staying power is the increasing number of hedge fund managers that are entering the leveraged loan market. With them come the overhead and the need for more sophisticated systems and reporting to handle the unconventional cash flows, reporting and corporate actions of leveraged loans. Over the past three years, JPMorgan FCS, the industry leader in software and services for the leveraged loan market, has seen significant hedge fund client growth.

JPMorgan FCS has been an industry leader in leveraged loan and high-yield solutions since 1997. The business provides portfolio management software and outsourcing services that increase the efficiency and accuracy of tracking and managing portfolios of syndicated bank loans, high-yield bonds, asset-backed securities, equities and certain credit derivatives. FCS continues to provide solutions to participants in this market, and maintains an arm's-length vendor relationship with JPMorgan Chase Bank, N.A.

Most recently, FCS has expanded from a traditional software company to a software and services company via its back office outsourcing solution. "The current goal is to expand the product offering to include leveraged loan data that will provide a platform to significantly change a historically inefficient market," says Mark Murray, head of JPMorgan FCS. This will complete a multiyear strategy, and we will become a technology company with a product suite consisting of software, services and data." • • •

For more information about JPMorgan FCS products and services, visit fcsoft.com.

DELIVATE BUILDING How Outsourcing

As private equity assets continue to play an ever-important role in institutional portfolios globally, and as private equity firms lure more capital, the growth opportunities the industry faces can present formidable administrative challenges to both private equity firms and institutional investors.

How Outsourcing Can Enhance this Alternative

A growing number of institutional investors and private equity firms are learning that the most prudent way to succeed in the lucrative private equity space lies through outsourcing administration and operations. Here's why.

Growing Pains

"It's becoming increasingly difficult for private equity firms to hire fund accountants with relevant and sufficient experience. The skill set is increasingly more expensive and scarce," says Robert Caporale, head of JPMorgan's Private Equity Fund Services (PEFS), a newly launched division within WSS Alternative Investment Services (for more on PEFS, see jpmorgan.com/visit/PEFS).

This scarcity of talent, particularly when it comes to professionals who understand the unique finance and accounting needs of the asset class, has placed heavy burdens on private equity firms and institutional investors alike.

For private equity firms, "The cost to attract and retain the right talent can be considerable," says Jim Hutter, chief operating officer for JPMorgan PEFS, "this challenge applies to both new private equity firms or those established firms attempting to maintain an existing in-house staff."

In addition to the cost of hiring talent, there is also the time needed to train them. "Most of the qualified people are already part of an operating private equity firm, and since there is no broad training ground for private equity partnership and fund accounting, there's really no centralized place to find the talent," says Al Foreman, head of business development for JPMorgan PEFS. "Building the finance and accounting staff for a private equity entity is one of the greatest barriers to entry. The search alone can be very time consuming."

Since many new private equity firms are formed when a handful of investment professionals spin off from their previous firm and launch a new fund, the level of expertise across the front to back office can vary dramatically. "If those investment professionals were not previously focused on the finance and accounting processes and procedures, they are not going to have the expertise to know how to properly set up that infrastructure at their new venture," says Foreman.

For investors in those new firms, Foreman notes that, "It can mean the difference between investors receiving minimal, perfunctory reporting versus truly understanding the depth and complexity of returns generated by a private equity investment."

"Building the finance and accounting staff for a private equity entity is **one of the greatest barriers to entry.** The search alone can be very time consuming."



Robert Caporale



Albert Foreman



James Hutter



Cesar Estrada

The lack of a comprehensive industry standard on administration or reporting is another reason to consider outsourcing. "There is no single standard yet available to guide a new entity on the way your capital account statements should be delivered or the timing or framework for such reports," says Hutter. "The fact that the business is still a bit non-standardized makes creating and maintaining a consistent process more challenging."

The True "Alternative": Outsourcing Private Equity Administration

While the number of domestic firms being serviced by private equity outsourcers (or servicers) is estimated by some industry experts to be roughly 10% to 15%, the benefits of outsourcing — as evidenced by its prominent role in the hedge fund industry — suggest that this percentage will grow.

Why Outsource What You Could Do In House?

From a foundational perspective, outsourcing can help clients focus on their strengths. While handling back office functions internally is an option, "Outsourcing helps clients focus on what's important — maximizing investment returns," says Caporale. "Effectively running private equity operations requires extensive internal processes and procedures, from both a risk management and efficiency perspective," explains Foreman.

In spite of the increasing prominence of industry-related groups such as the Private Equity Industry Guidelines Group (PEIGG), the Institutional Limited Partner Association (ILPA) and the European Venture Capital Association, which aim to improve the consistency and transparency of information exchanged by participants in the private equity space, standards remain in the formative stages. "Because information is not as readily available in the private equity arena as it is in the public space, investors have to rely heavily on the private equity fund's reporting to understand how their investments are performing," says Hutter, who contributed to the recent PEIGG guidelines recommending private equity reporting and measurement standards. This is one of the most tangible benefits of outsourcing to, or partnering with, a high-quality administrative firm.

To address the need for a talented team, a solid set of procedures and an ironclad infrastructure, outsourcing presents a viable alternative. "Given the nascent stage of the outsourcing industry, it will prove to be the most prudent and profitable manner to manage private equity operations over the long term," says Foreman.

How to Evaluate a Potential Partner

If outsourcing is the most efficient way to go, how should potential outsourcing partners be evaluated?

"When you think of the general risks of investing in private equity as an asset class, a major one is the lack of clarity in regard to information," says Foreman. "As investors become more sophisticated, they are demanding greater and more comprehensive information. A firm cannot always create or develop the infrastructure necessary to provide that and finding the right outsourcer can be the most effective solution to that challenge."

"Be wary of 'team averages'when it comes to years of experience."

Foreman believes the key lies in incisive evaluation. "The key is targeting your evaluation to hit upon the three most important areas in private equity administration: the people, the processes and the technology," he says. "So much of the success of the outsourcing relationship rests on the right infrastructure, and if you have that in place, outsourcing can prove to be the most profitable and prudent way to enter the private equity arena."

People: Find Out Who's Who

The teams of individuals who will service institutional limited partners or private equity firms are the most important element of the equation, and should be treated as such when evaluating potential outsourcers, according to Caporale. To begin with, clients should ask detailed questions about a private equity services entity's staff. "They should clearly understand the number of years of experience of the servicing team," says Foreman. "Be wary of 'team averages' when it comes to years of experience," he warns.

Similarly, ask the potential outsourcing partner to identify exactly who will be assigned to handle your account. "Often, private equity service firms bring out their very best, most experienced people to handle queries in the initial stages of acquiring new business," says Jim Hutter. "Then the client signs up, and finds out someone else, and typically more junior is going to be directly servicing the account."

An offshoot of this concern relates to whether your service team will be learning on the job. "The people handling your portfolio should have specific private equity experience behind, not in front of them," advises Hutter. Meeting the prospective team to learn about its personalities, structure and capabilities is also recommended.

Process: How Efficient is it?

"Private equity is, in large part, a combination of a professional service and a technology business," says Jim Hutter. "The prospective client should think about what capabilities exist now and which platform in the future will deliver all the information needed and in the frequency required." The right processes, he adds, can enhance the effectiveness and the efficiency of the outsourcing experience, but the key is knowing what to look for and what to ask.

Scott Kraemer, JPMorgan PEFS chief technology officer suggests, "Make sure that the majority of the information that is generated from the firm's system is done via straight-through processing." While there are a few instances where an extremely complex transaction might require some degree of manual intervention, straight-through processing for most transactions is preferable. Why? "To minimize human error and time delays," agrees Hutter.

In addition, too much manual input or intervention could drive up the entity's costs, which could inevitably be passed on to the client. "By not having made an adequate investment in technology, a firm could end up having to resort to a more expensive solution — adding bodies to the process, rather than state-of-the-art technology," says Hutter. "The right platform can help reduce costs over the long term."

(cont. on page 24)

More Suggestions on evaluating a team include:

- ► Ask for evidence to demonstrate that client service is a value. How is the team structured?
- ► Find out if you'll have a primary point of contact, and if that person has substantial private-equity-related experience, as well as a deep familiarity with private equity accounting.
- ▶ When learning about the team's experience levels, have a direct dialogue with each member, if possible, says Jim Hutter. By asking specific questions about the private equity business, "You'll be able to quickly ascertain whether they have the right experience," he says.
- ► Inquire about turnover. High turnover at your administrator could prove to be disruptive to your long-term investment objectives.
- ► Be alert to any sign of single-person dependencies. The smaller the servicing firm, the more likely this will be a problem. Inquire about succession plans and each team member's responsibilities.



Long considered one of the cornerstones of the alternative investment universe, private equity is growing in acceptance and popularity. According to the 2005–2006 Russell Survey on Alternative Investing, private equity has gained a foothold among institutional investors, particularly large endowments, foundations and pension plans. "Private equity is now truly a 'viable alternative'" among these client segments, according to the study.

Private equity experts agree. "Pension funds and other large institutional investors have typically allocated most of their portfolio to more traditional investments (e.g. fixed income and equity securities), but now they're allocating increasingly larger portions of their assets to alternative investments," says Robert Caporale, head of JPMorgan's Private Equity Fund Services (PEFS).

Meanwhile, private equity firms themselves are capturing a bigger slice of the marketplace's available investment capital. Fundraising increased dramatically in 2005; with 92 new funds formed and new commitments totaling \$53.7 billion in the second quarter alone, up from 46 funds and \$13.7 billion in the first quarter of 2005. By mid-2005, fundraising for private equity ventures had reached a run rate that put it on track for well over \$100 billion in commitments for the year.

Through October 2005, more than \$137 billion had been invested in private-equity-related ventures, an amount that outpaces those of prior years.

In the United States, private-equity-backed IPOs accounted for 53% of the deals priced through mid-October 2005, compared with 30% in the year earlier, according to Dealogic. In large part, the influx of new companies that are owned by private equity firms has to do with the availability of low-interest debt in recent years, which has made buying large companies easier and cheaper than in the past.

It's All About Performance

Why the surge in interest and demand? The answer is simple: top private equity firms continue to deliver better returns than more traditional, publicly traded investments. According to the Russell study and other findings by the global investment group, most institutional investors believe that the annualized returns from top private equity managers will eclipse those of their public equity investments over the next two to five years. "The top quartile venture and buyout funds are delivering returns that are outpacing the public markets, and doing so in a consistent manner," says Al Foreman, head of business development for JPMorgan PEFS.

The lure of superior returns is not exclusive to the United States, either. Private equity investing in Europe has become a major trend, thanks in large part to the strong returns from European investments during and after the U.S. recession. As a result, more and more U.S. private equity firms have brought sizable vehicles specifically targeting Europe to market. Commitments to private equity are forecasted to reach record levels by 2007, with markets that have traditionally had lower allocations to private equity, such as Europe and Japan, showing the largest expected increases. "These trends reflect the increasing appetite of institutional investors to seek

out the higher returns that private equity has historically provided, as well as signaling a greater acceptance of the liquidity and risk profile of the asset class," says one Russell Group executive. Al Foreman of JPMorgan agrees. "We're seeing an increase in the globalization of the private equity industry."

Other factors come into play, as well, making private equity more attractive to investors. Above all, investors remember the three-year equity market downturn from 2000 to 2002 all too well, and their subsequent wariness of stocks lingers. In addition, the prospect of higher interest rates has prompted some to look past bonds for more promising returns, while others are concerned that the return premium for stocks over bonds in the next decade might be as low as 3%. Finally, greater confidence in hedge fund managers' ability to successfully extract alpha from inefficient markets globally has added to the lure of private equity. Combined, these factors seem to boil down to a simple ingredient for potentially successful investing: diversification. "It's simple — the historically higher returns and the additional level of diversification it [private equity] can offer are driving the trend," says JPMorgan's Robert Caporale.

The future looks bright for private equity, as foundations and endowments report they plan to continue to increase their allocations to the asset class. Clearly, what was once marked as "alternative" is becoming an essential component in a fully diversified portfolio for many institutional investors.

JPMorgan Private Equity Fund Services

DETS

Building on Long-term Experience and Success

In November 2005, JPMorgan Worldwide Securities Services (WSS), a leading global provider of fund services, announced the launch of JPMorgan Private Equity Fund Services (PEFS). The new business unit offers a full suite of high-quality outsourced private equity administration services to both private equity firms and institutional limited partners.

While JPMorgan PEFS is officially deemed new, the enterprise stems from a long-term, highly experienced and established entity, JPMorgan Partners, which operated for more than 20 years. "JPMorgan Private Equity Fund Services emerges from an existing private equity finance and technology operation that has built a strong track record in serving clients in this space," states Robert Caporale, head of JPMorgan PEFS.

The new entity includes more than 130 professionals with decades of experience in private equity accounting and operations. With the enviable capital base supporting JPMorgan PEFS, it enters the private equity services universe among the top private equity firms in regard to assets under administration. Caporale adds that JPMorgan PEFS makes its debut as "one of the few fully integrated sources of fund administration and banking services," due to the multifaceted nature of the JPMorgan enterprise itself.

Private equity is a hugely important business to JPMorgan, as indicated by its investment banking revenues from private equity, commanding 8.5% of the overall sponsor market, according to Financial Times.

"JPMorgan's extensive experience in private equity, our proven accounting and operations expertise, and best-in-class technology positions us as the pre-eminent provider of outsourced private equity services," says Al Foreman, head of business development for JPMorgan PEFS. "We have the industry's best people, proven processes and superior technology. These are the three most important pillars of strength for any private equity outsourcer or servicing entity. We have the very best resources needed to develop and effectively manage high-quality outsourcing relationships with both general partners and institutional limited partners."

This track record combined with a worldclass infrastructure point to JPMorgan's competitive lead. "Due to the work we've already done across the variety of funds that were raised and managed by JPMorgan Partners, we have what I would consider the broadest experience in fund administration worldwide," adds Foreman.

JPMorgan PEFS offers a comprehensive and detailed list of the benefits to potential outsourcing clients, be they private equity firms or institutional limited partners.

Size: With a staff of more than 130 people, the risk of "single-person dependencies" is virtually eradicated for clients.

Support: JPMorgan's capital base is expansive enough to ensure business continuation, capital expansion and improvements, longevity and the resources to attract, train and retain the industry's best and brightest professionals.

Structure: JPMorgan PEFS is founded on long-term (20+ years) experience, and has proven processes that were developed through many years of experience interacting with CFOs. "Our teams are structured such that the CFO will have a primary point of contact with a subject matter expert," says Jim Hutter, chief operations officer of JPMorgan PEFS. "The primary client contact will be an accounting professional (CPA) with 10 or more years of private equity experience and a client service mentality." Surrounding that point of contact is a support team of fund managers and fund accountants. "Behind the scenes in our organization, there is more depth, because we offer a broader array of services than do many of our competitors, such as cash management, treasury, FX, and hedging services," says Hutter.

Technology: An integrated technological platform that serves as a comprehensive general ledger package; a solid, dependable master file system and a flexible reporting tool.

JPMorgan PEFS clients can also access the following reporting features through a Web-based facility:

- ► Balance sheet reports
- ► Income statement reports
- ► All supporting documentation for an audit
- ► Compliance and regulatory reporting support
- ► Investment roll-forwards
- Custody holdings and certificate numbers

For private equity firms, "We offer a full suite of established outsourced services," says Caporale. "Prior to the launch of JPMorgan PEFS, we had well over 100 people handling fund accounting, administration, investor tracking and reporting, as well as all the tax preparation."

For institutional investors, JPMorgan PEFS positions itself as an extension of the client's investment arm "Its not uncommon that an institutional investor might have commitments to 300 different funds," explains Caporale. "Today, that

investor would get a statement from each of those 300 funds, and they need to figure out their concentration in certain segments, funds, regions, industries, exposure, etc., and where the risk lies. This streamlined analysis and reporting service is what we offer to institutional investors. This capability existed in WSS, but has now been repositioned to focus exclusively on the institutional limited partner market through JPMorgan PEFS."

An array of competencies, deep experience, as well as a track record of reliability and success, are all qualities that JPMorgan PEFS brings to market that help distinguish the entity from the bulk of the surrounding market. "Whether it is our global reach, our breadth of product, our capital base, our extensive experience or our people, we believe we offer the best-in-class outsourced administration service worldwide," says Caporale.

"If you are going to outsource, you want a provider who can respond to the rapidly changing private equity landscape.

JPMorgan is well positioned to be the premier, one-stop firm for high-quality private equity administration. Our services enable private equity managers and institutional investors to focus on what they do best — building wealth."

"Outsourcing can prove to be the most profitable and prudent way to enter the private equity arena."

More Suggestions for evaluating a potential partner's technology:

- ► Look for a company that has a definitive, step-by-step transaction process, and some standardization of reporting and financial records.
- Ask how detailed, or granular, reporting will be. Overviews are fine, but if a CFO needs an answer quickly on issues such as compliance status or sources of performance, the platform should be able to deliver such information on a timely basis.
- ► Ask for a demonstration of the integration of the outsourcer's platform. "Private equity is a self-contained, multifaceted process," says Kraemer. "You have to make the investments, service them and report on them. A prospective client should make sure all those functions are cohesive and integrated. If there are too many 'creases' between functions, that could be a red flag, signaling the outsourcer faces impediments to doing a thorough, proper job."
- ► Evaluate the technology experts in the firm as you do the service team. Can technology experts in the firm explain or demonstrate that they understand the private equity business?
- ► Find out if information is being transferred and transmitted in a safe and secure manner. Ask whether the firm understands how to transmit information in a way that protects you as an investor or fund.
- ► Are communications encrypted?

 Because of the rapid growth in private equity, spreadsheet programs and e-mail are often still used to transport confidential information. "This inherently puts investors at higher degrees of risk," says Kraemer.

Another red flag: if the outsourcer has what seems to be an archaic or overly manual process, it may be unwilling or unable to make the necessary capital investment to bring its current platform up to speed. This can signal another, perhaps deeper problem, which is the capital base that stands behind the private equity services company itself.

"Look to evaluate the capital base of the outsourcer, as it can divulge their potential success for years to come," says Kraemer, who says this factor can determine whether the servicing firm will have the willingness and ability to make critical technological improvements over the long term. If they claim to have invested in their infrastructure, inquire about what specific capital improvements they've made, and how these developments relate to the reporting and accounting foundation.

If a private equity services firm is linked to a strong capital base, it will likely have a lifeline and a pipeline of capital to keep technology current. "This is essential," says Hutter, "for when regulatory, market, tax and accounting issues evolve, as they inevitably will."

Technology: A Critical Component of Private Equity Administration

While technology plays a prominent role in the mutual fund or separate account arenas, it has an even more critical hold on private equity. For one, there's the complexity of the business, which even a merely adequate private equity systems platform needs to address. Additionally, there's the issue of tax. "Private equity processes and platforms are driven by tax — and soon enough, regulatory — requirements," says Kraemer.

For private equity entities and institutional investors, outsourcing can translate into a myriad of opportunities to improve their platforms and systems, and can lead to additional benefits. "Having a third party handling the accounting function will open the door for greater transparency," points out Kraemer.

The other issue that comes into play is the current age and stage of the industry itself. Unlike in the mutual fund or global custody areas, "Technology in the marketplace has not universally caught up to the processing requirements of the private equity business," notes Kraemer. Private equity technology and software systems are expensive, he says, because it remains a somewhat complex, niche part of the financial services business. "Make sure to consider technology when evaluating an outsourcer," says Kraemer. Also, he recommends that clients "factor into the equation that you'll be able to avoid the substantial capital outlay it would require to do it yourself."

While current platforms are paramount, Kraemer recommends that prospective clients talk to the entity about its longer-term technology strategy. "Because the industry is changing so rapidly and poised for even greater growth, what are the firm's plans for capital improvements to existing systems?" he asks. "As the industry changes and evolves, you want to be sure your outsourcer's systems will, too." •••

More possibilities from across JPMorgan Chase & Co.

Single-digit, volatile equity markets have led investors to reach for return while not stretching beyond the limits of fiduciary care. Alternative investments can help balance risk and return objectives by offering consistent sources of alpha, with low correlation to more traditional assets. In addition to the Alternative Investment Services unit in Worldwide Securities Services, JPMorgan offers a variety of products and services to address varying clients' needs — from investing, to prime brokerage, to cash management. Here are some other JPMorgan alternative investment solutions.

investing

Asset & Wealth Management

Asset & Wealth Management (AWM) provides investment advice and management for institutions and individuals. With assets under supervision of \$1.1 trillion as of December 31, 2005, AWM is one of the largest asset and wealth managers in the world. AWM serves four distinct client groups through three businesses: institutions through JPMorgan Asset Management, ultra-high-net-worth clients through the Private Bank, high-net-worth clients through Private Client Services, and retail clients through JPMorgan Asset Management. The majority of client assets are in actively managed portfolios. AWM has global investment expertise in equities, fixed income, real estate, hedge funds, private equity and liquidity, including both money-market instruments and bank deposits. AWM also provides trust and estate services to ultra-high-net-worth and high-net-worth clients, and retirement services for corporations and individuals.

JPMorgan Asset Management serves institutions with hedge fund strategies spanning the risk/return spectrum, from well-diversified multi-strategy, multi-manager funds of hedge funds to specialized, single strategy, single manager alternatives. Investment professionals will determine what's right for your organization depending on investment objectives, hedge fund experience and resourcing, manager access and current portfolio structure. "AWM works with your organization to help determine the strategy that best meets your investment objectives," says John Baumann, head of U.S. East Region Sales and Client Service and President, JPMorgan Asset Management (Canada) Inc., "whether you are investing to round out an existing hedge fund allocation or are making a first-time investment."

JPMorgan Asset Management, together with its strategic partner, Highbridge Capital Management, offers these hedge fund capabilities:

- ► The expertise of an industry leader with more than 10 years in managing hedge fund of funds and direct hedge fund strategies.
- An array of hedge fund of funds and direct hedge fund strategies to meet a range of risk/return objectives.

spotlight on alternative investments

- More than \$16 billion in hedge fund assets under management as of December 31, 2005.
- Over 235 employees worldwide, with 70 devoted to fund of funds and 165 to single manager fund strategies.
- Access to best-of-class managers with a rigorous selection and monitoring process.
- ► A disciplined, multi-tiered approach to risk management.

Contact your JPMorgan representative for more information or visit im.jpmorgan.com/imweb/impub/am_index_assetmgmt.jsp

cash management Treasury Services

Treasury & Securities Services (TSS) is a global leader in transaction, investment and information services that support the needs of chief financial officers, treasurers, issuers and investors worldwide. TSS operates through two divisions: Worldwide Securities Services, detailed throughout this issue, and Treasury Services.

Treasury Services (TS) moves, concentrates and invests client money, and provides trade finance and logistics solutions. The business ranks first in U.S. dollar clearing, processing an average of \$3.2 trillion in wire transfers daily.

As a recognized leader in cash management services provided to Wall Street, Treasury Services has built a field of expertise in Alternative Asset account solutions and structures:

- Experience with hedge fund/private equity/fund-of-funds legal entity structures and client on-boarding.
- Experience with conduit accounts, pass-through, LLC, LPs and offshore tax implications.
- Payment flow design throughout fund complex.

Treasury Services products include:

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- ► Global money movements and multi-currency account services.
- Suite of FX and related services.

Liquidity management

- Cash management pooling and sweeping structures for on- and off-shore investments.
- ► High yielding short-term investments.

Information management and client access portals

Real-time reporting, data gathering and analysis.

Contact your JPMorgan representative or Al Carpetto on 212-552-4838 or via email at alfred.j.carpetto@jpmchase.com for more information. •••

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editor's clip

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